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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,129	08/07/2006	Mathias Rausch	SC12838EM	7803

23125 7590 06/29/2009

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EXAMINER	
BAIG, ADNAN	
ART UNIT	PAPER NUMBER
2416	

NOTIFICATION DATE	DELIVERY MODE
06/29/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/565,129	RAUSCH ET AL.	
	Examiner	Art Unit	
	ADNAN BAIG	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3/17/2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7,9 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-7, 9 and10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3-7, 9 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3-7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le Scolan et al. (US 7,058,729) in view of Torsti (US 5,724,397).

Regarding Claim 1, Le Scolan discloses a computer node for operating in a system comprising:

a plurality of network clusters (**See Fig. 2 & Col. 5 lines 25-33 i.e., "first, second network"**), wherein a number of network clusters comprise a plurality of computer nodes (**see Col. 10 lines 26-30 i.e., "other nodes" connected to sync node (Fig. 2 Item "CMa")**), the computer node comprising a synchronization unit (**See Fig. 2, Sync nodes "CMa, CMb"**) for comparing network timing information for a first network with network timing information for a second network (**see Col. 15 lines 28-31**) and for

communicating to the first network a sign of the difference between the first network timing information and the second network timing information to allow the first network to alter its network timing information using the sign of the difference (**see Col. 13 line 16 - Col. 15 lines (1-48)**).

Le Scolan does not disclose wherein a network timing difference between the first network and the second network is reduced in sufficiently small predetermined step values to avoid loss of local synchronization with other computer nodes in its network cluster. However the limitation is known in the art of communications.

Torsti discloses a network timing difference between the first network (**modem 1**) and the second network (**modem 2**) being reduced in sufficiently small predetermined step values, (**synchronization (i.e., network timing difference) is performed between two modems (see Col. 1 lines 17-45) in stages (i.e., predetermined step values), see Col. 4 lines 25-33)**).

(Torsti further teaches when an initial phase offset in the instance of a new connection is established, errors (**i.e., loss**) of symbols can occur during the synchronization stage, (**see Col. 1 line 65 – Col. 2 lines (1-7)**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a synchronization unit in a computer node comprising a plurality of network clusters, wherein a number of network clusters comprise a plurality of computer nodes, for comparing network timing information for a first network with network timing information of a second network for communicating to the first network a sign of the

difference between the network timing information of both networks to allow the first network to alter its network timing information using the sign of difference as taught by Le Scolan, by reducing the network timing difference in both networks in sufficiently small predetermined step values as taught by Torsti to avoid loss of synchronization with other computer nodes in its network cluster because the teaching lies in Torsti that gradual synchronization prevents loss of symbols between two modems (i.e., networks).

Regarding Claim 3, the combination of Le Scolan in view of Torsti disclose a computer node according to claim 1, wherein the network timing information corresponds to the phase of the network clock, (**Referring to Fig. 1 Le Scolan illustrates the phase offset in the computer node, See Col. 20 lines 24-31**).

Regarding Claim 4, the combination of Le Scolan in view of Torsti discloses a computer node according to claim 1, wherein the synchronization unit is arranged to provide the sign of the difference to the second network to allow the second network to alter its network timing information to allow the network timing difference between the first network and the second network to be reduced, (**The difference is calculated and synchronization is performed to the applied network, see Le Scolan, Col. 6 lines 38-60**).

Regarding Claim 5, the combination of Le Scolan in view of Torsti discloses a computer node according to claim 1, wherein the computer node is arranged to be coupled to the first network, (**The first and second network described in Col. 5 lines 59-61, are illustrated by Le Scolan in Fig. 2, where node "A" is coupled to the first network**).

Regarding Claim 6, the combination of Le Scolan in view of Torsti discloses a computer node according to claim 1, wherein the computer node is arranged to be coupled to the second network via a second computer node, (**see Col. 5 lines 59-67 & Fig. 2, Le Scolan illustrates Nodes A and B are couple to each other in order to communicate information between the two networks, see Col. 10 lines 55-60**).

Regarding Claim 7, Le Scolan discloses a system comprising a plurality of network clusters comprising:

a first network, a second network, (**See Fig. 2 & Col. 5 lines 25-33 i.e., "first, second network"**),

a computer node having a synchronisation unit (**See Fig. 2, Sync nodes "CMa, CMb"**) for comparing network timing information for the first network with network timing information for the second network (**see Col. 15 lines 28-31**) and for communicating to the first network a sign of the difference between the first network timing information and the second network timing information such that a network clock rate of the first network is reduced (**see Col. 13 line 16 - Col. 15 lines (1-48)**).

Le Scolan does not disclose a network clock rate of the first network is reduced in sufficiently small predetermined step values to avoid loss of local synchronization with other computer nodes in its network cluster using the sign of the network timing difference between the first network and the second network. However the limitation is known in the art of communications.

Torsti discloses a network clock rate between the first network (**modem 1**) and the second network (**modem 2**) being reduced in sufficiently small predetermined step values, (**synchronization (i.e., network clock rate) is performed between two modems (see Col. 1 lines 17-45) in stages (i.e., predetermined step values), see Col. 4 lines 25-33)**).

(Torsti further teaches when an initial phase offset in the instance of a new connection is established, errors (**i.e., loss**) of symbols can occur during the synchronization stage, (**see Col. 1 line 65 – Col. 2 lines (1-7)**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a first and second network with a synchronization unit in a computer node, for comparing network timing information for the first network with network timing information for the second network for communicating to the first network a sign of the difference between the network timing information of both networks, such that a network clock rate of the first network is reduced as taught by Le Scolan, by reducing the network clock rate in the first network in sufficiently small predetermined step values using the sign of the network timing difference between both networks as taught by

Torsti to avoid loss of synchronization with other computer nodes in its network cluster because the teaching lies in Torsti that gradual synchronization prevents loss of symbols between two modems (i.e., networks).

Regarding Claim 9, the combination of LeScolan in view of Torsti discloses a system according to claim 7, wherein the first network has a plurality of nodes (**Referring to Fig. 2, Le Scolan illustrates Node A in the first network contains a plurality of nodes) See Col. 11 Lines 6-8**.

and the first network timing information is used to maintain synchronisation of the plurality of nodes, (**The synchronized networks are described to be maintained) See Col. 5 Lines 55-58**).

wherein the change in network timing information is sufficiently small to allow the plurality of nodes to maintain synchronisation should one of the plurality of nodes not change its timing information in response to the sign of the difference communicated by the computer node. (**In the event the timing information is not changed by a node in the network or one of the plurality of nodes, synchronization in the network is shown to still be maintained). See Le Scolan, Col.19 Lines 1-19.**

(Synchronization is shown to be maintained in the network, in the case of a data frame loss), see Le Scolan, Col. 18 Lines 11-15).

Regarding Claim 10, Le Scolan discloses a method for allowing synchronization of a first network and a second network in a system comprising a plurality of network clusters (**See Fig. 2 & Col. 5 lines 25-33 i.e., "first, second network"**),, wherein a number of network clusters comprise a plurality of computer nodes (**see Col. 10 lines 26-30 i.e., "other nodes" connected to sync node (Fig. 2 Item "CMa")**), the method comprising:

comparing network timing information for the first network with network timing information for the second network (**see Col. 15 lines 28-31**).

communicating to the first network a sign of the difference between the first network timing information and the second network timing information wherein a network-timing difference between the first network and the second network is reduced (**see Col. 13 line 16 - Col. 15 lines (1-48)**).

Le Scolan does not disclose reducing the network timing difference between the first network and second network in sufficiently small predetermined step values to avoid loss of local synchronization with other computer nodes in its network cluster using the sign of the network timing difference between the first network and the second network. However the limitation is known in the art of communications.

Torsti discloses a network timing difference between the first network (**modem 1**) and the second network (**modem 2**) being reduced in sufficiently small predetermined step values, (**synchronization (i.e., network timing difference) is performed between**

two modems (see Col. 1 lines 17-45) in stages (i.e., predetermined step values), see Col. 4 lines 25-33)).

(Torsti further teaches when an initial phase offset in the instance of a new connection is established, errors (**i.e., loss**) of symbols can occur during the synchronization stage, (**see Col. 1 line 65 – Col. 2 lines (1-7)**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to compare network timing information for the first network with network timing information of the second network for communicating to the first network a sign of the difference between the network timing information of both networks wherein a network timing difference between the first network and second network is reduced as taught by Le Scolan, by reducing the network timing difference in both networks in sufficiently small predetermined step values using the sign of the network timing difference between both networks as taught by Torsti to avoid loss of synchronization with other computer nodes in its network cluster, because the teaching lies in Torsti that gradual synchronization prevents loss of symbols between two modems (i.e., networks).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADNAN BAIG whose telephone number is (571) 270-7511. The examiner can normally be reached on Mon-Fri 7:30m-5:00pm eastern Every other Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADNAN BAIG/
Examiner, Art Unit 2416

/Huy D. Vu/

Supervisory Patent Examiner, Art Unit 2416